

Multistate survey of nursery laborer level employees: OH, MI, DE, TN, FL, IN, AZ and RI. A mailed and Self administered questionnaire Preliminary results 2006

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Significance to the industry: The demographics of the nursery industry in the United States have changed dramatically in the past 10 to 15 years. Nowadays the majority of the worker level of nursery staff is Spanish speaking. However there have no workforce surveys conducted in this industry to support that belief. From the only survey that has been done (Mathers, 2003) in Oregon and Ohio, Hispanic employees did represent the majority of the nursery industry workforce and the technical needs of this audience were not being adequately addressed. The major objective of this multistate survey is to determine the composition percentages by nationality and language of the nursery industry workforce in the United States. Other objectives are to determine the years of experience, technical information interests, work activities, gender, age and current technical information resources available to nursery workers in Ohio, Michigan, Delaware, Tennessee, Florida, Indiana, Arizona and Rhode Island.

Materials and methods: All research activities involving the use of human beings as research subjects must be reviewed and approved by The Ohio State University (OSU) Institutional Review Board (IRB). An exemption was provided on August 22, 2005 by the OSU IRB. Exemptions were also obtained by others IRBs in other states working in the surveys between August and December 2005.

A random sample of 40 nurseries in each state was drawn from a list of United States (US) nurseries developed by Hodges et al.(2005). Researchers from the eight states, interested in participating in the survey were identified at the spring meeting (February/2004) of the S-1021 committee, "Technical and Economical Efficiencies of Producing, Marketing and Managing Environmental Plants." The eight researchers are Ursula Schuch, University of Arizona; Bridget K. Behe, Michigan State University; Brian Maynard, University of Rhode Island; Alan W. Hodges and John Haydu, University of Florida; Jennifer H. Dennis, Purdue University, Susan Barton, University of Delaware; John R. Brooker and Charles Hall University of Tennessee; Hannah Mathers and Alejandra Acuña, OSU. These researchers contacted each of the nurseries selected for their state. If 30 nurseries: 15 medium and 15 large firms could not be found to participate, in the first sample of 40, then additional random samples were drawn until 30 firms were obtained. Each nursery that agreed to participate provided a contact name and the number of Spanish and English surveys they would require. A survey package containing a Self Administered Questionnaire with 31 questions and a return business reply envelope were sent and returned to OSU, Columbus, Ohio. To date 4416 surveys (64.2% Spanish version and 35.8% English version) have been mailed to the 8 participating states. The current response rate is 21%. Data was analyzed using SPSS (®2006 SPSS Inc. Chicago, Illinois).

Results and discussion: from the current analysis the majority of the workforce nationally is male (69.3%). However, surprisingly, females represent 30.7% of the nursery industry workforce (Table 1).

This is quite a change over the past five to seven years. Mathers (2003) surveying nursery workers from Ohio and Oregon during 1999 and 2001, found that less than 5% of those surveyed in either states were women. By far the majority of US nursery workforce is composed of Mexicans (63.5%). Within this nationality the majority of workers are male 46.5% (Table 1). The next largest contributor to the workforce is the US at 22.3%. From the US the majority are females (Table 1). The primary language spoken at work is Spanish (78.9 %). Only 5.2 % of the workforce consider themselves bilingual and 23.5% of the Spanish speakers indicated they understood “no” English at all (data not shown). By nationality, Mexicans are the most interested in obtaining additional education (62.9%)(Table 2). Males (69.7%) were more interested in education than females (30.3%)(Table 2). Summed over two age groups 25 to 44 years, these ages represent the majority of those interested in technical courses opportunities (51.7%) (Table 2). There is a difference from Mathers (2003) where the majority of the respondents indicated their positive reception to receiving technical information in Spanish (93% in Ohio, 97% in Oregon).

Table 1. Composition of the nursery workforce in 8 states (preliminary results) based on gender and country of origin.

Country of origin	Worker gender (Percentage of the total)		Total
	Male	Female	
Other	1.2%	.8%	1.9%
Mexico	46.5%	17.1%	63.5%
Honduras	.3%	.0%	0.3%
Puerto Rico	4.8%	.6%	5.5%
Nicaragua	.0%	.1%	0.1%
Guatemala	4.2%	2.1%	6.3%
United States	10%	12.3%	22.3%
Total	69.3%	30.7%	

Table 2. Education interest by Country of origin, gender and age.

		Education interest*		Total
		No	Yes	
Country of origin	United States	7.3%	14.5%	21.8%
	Guatemala	1.1%	6.1%	7.1%
	Nicaragua	.1%		.1%
	Puerto Rico	2.6%	3.2%	5.8%
	Honduras	.1%	.2%	.3%
	Mexico	9.8%	53.0%	62.9%
	Other	.8%	1.2%	1.9%
Total		21.8%	78.2%	100.0%
Worker gender	Female	8.4%	21.9%	30.3%
	Male	13.8%	55.9%	69.7%
Total		22.2%	77.8%	100.0%
Worker age	Less than 18 years old	0%	.2%	.2%
	18 to 24 years old	4.0%	18.2%	22.2%
	25 to 34 years old	4.8%	24.0%	28.7%
	35 to 44 years old	5.7%	17.3%	23.0%
	45 to 54 years old	4.4%	11.9%	16.3%
	55 to 64 years old	2.2%	4.9%	7.1%
	65 years or older	1.0%	1.4%	2.4%
Total		22.1%	77.9%	100.0%

*Considering the answer of the question: Are you interested in attending a training course or class?

Literature cited

Hodges A., C.Hall, and J. Haydu. 2005. Economic Impacts of the Environmental Horticulture Industry in the United States. Proc. Southern Nurs. Assoc. Res. Conf. Vol.50: 305-310.

Mathers, H. 2003. Technical information requested by Hispanic nursery employees survey results from Oregon and Ohio. J. Environ. Hort. 21: 184-189.